

but *filicula* is similar in superficial appearance to the North American *Schreckenstenia erythriella* (Clemens). The former can be distinguished immediately from the latter by its yellow legs and the brassy fascia of forewing.

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NATURAL HISTORY OF IMMATURE STAGES OF MICROLEPIDOPTERAN *STATHMOPODA FILICULA* CLARKE¹

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ABSTRACT: A partial life history of *Stathmopoda filicula* Clarke is described.

DESCRIPTORS: Microlepidoptera, Stathmopodidae, *Stathmopoda filicula* Clarke, partial life history described.

On August 9th, 1975, larvae of *Stathmopoda filicula* Clarke were found on a frond of an unidentified fern growing on a roadbank in a cleared area about 12 km. east of Buenaventura, Colombia. This zone, on the coastal plain west of the Andes, is classified by Espinal and Montenegro (1963) as pluvial tropical forest. The larvae were most common near the central part of the leaf where the spores were darker and more mature. Each larva was living between the underside of the leaf and a sheet of white silk in which were included many empty sporangia. At one edge of each sheet was a hole in the leaf (probably chewed by the larva — one larva in captivity chewed a new hole, apparently discarding the pieces of leaf). When larvae were disturbed, they retreated through these holes onto the other (top) side of the leaf where there was a short flap made of silk and empty sporangia covering the hole. The larva usually retreated only part way through the hole, and the flap more or less covered its body; the flap was usually not large enough, however, to cover its entire body.

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Larvae were kept in captivity on pieces of the fern leaf, and several activities were observed:

1). Spinning — the head was held more or less level and swung from side to side. I could not distinguish any pattern in the movement other than that in several cases larvae seemed to try to work a sporangium into the sheet.

2). Feeding — the larva went to the edge of the sheet to a clump of sporangia and pulled a single sporangium back under the sheet. It then began chewing it, and in some cases I could watch through its semi-transparent head as the black spores entered its digestive tract one by one. The spores themselves were apparently not chewed, only the sporangium. Even small larvae were capable of breaking open sporangia.

3). Defecation — the posterior end of the body was just beyond the edge of the sheet (often just after the larva made a turn of 180°) and a black, apparently dry, and more or less round pellet released. This behavior seems designed to insure that feces are completely discarded, and none were found incorporated in fresh sheets in nature. In captivity, however, where the leaves were often oriented so that the larvae were on the top surfaces, feces were incorporated into the sheets.

4). Metamorphosis — larvae ready to pupate constructed chambers of dense white silk, and then change color from creamy white to bright pink-red and appeared to swell somewhat. The first individual changed to a pupa (white color) six days after making its chamber, and the first adult emerged 17 days after the first pupation. These individuals were kept at temperatures somewhat lower than those of their natural habitat, and the developmental times may be overestimates of natural times.

LITERATURE CITED

- Espinal, L.S. and E. Montenegro. 1963. Formaciones Vegetales de Colombia. Republica Colombia, Insto. Geogra. "Augustin Codazzi", Bogota.